

AMENDMENTS TO THE CLAIMS

1-33. (Canceled)

34. (Previously presented) A method for delivering a therapeutic or diagnostic agent to a cell, comprising:

(a) treating a cell with a composition consisting essentially of a transport agent and a therapeutic or diagnostic agent in an amount sufficient to be taken into the cell by endocytosis to provide an endosome having an endosomal membrane and containing the composition, wherein the therapeutic or diagnostic agent is covalently coupled to the transport agent, wherein the transport agent is effective in disrupting the endosomal membrane, wherein the transport agent is a polycarboxylic acid polymer selected from the group consisting of poly(ethylacrylic acid), poly(propylacrylic acid), poly(butylacrylic acid), and mixtures thereof, and wherein the transport agent is hydrophobic at pH from about 5.1 to about 5.5; and

(b) releasing the transport agent and therapeutic or diagnostic agent from the endosome into the cell cytoplasm by the action of the transport agent on the endosomal membrane.

35. (Previously presented) The method of Claim 34, further comprising subjecting the treated cell to a stimulus to enhance the release of the therapeutic or diagnostic agent from the endosome to cytoplasm.

36. (Previously presented) The method of Claim 35, wherein the stimulus is ultrasound.

37. (Previously presented) The method of Claim 34, wherein the transport agent is hydrophilic at pH from about 6.8 to about 7.5, and hydrophobic at pH from about 5.0 to about 6.5.

38-56. (Canceled)

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57. (Previously presented) The method of Claim 34, wherein the therapeutic agent is selected from the group consisting of a nucleoside, a nucleotide, and an oligonucleotide.

58. (Previously presented) The method of Claim 34, wherein the therapeutic agent is selected from the group consisting of a protein, lipoprotein, glycoprotein, and peptide.

59. (Previously presented) The method of Claim 34, wherein the therapeutic agent is selected from the group consisting of a sugar and a polysaccharide.

60. (Previously presented) The method of Claim 34, wherein the therapeutic agent is a toxin.

61. (Previously presented) The method of Claim 34, wherein the therapeutic agent is a toxin selected from the group consisting of ricin, diphtheria toxin B chain, adenovirus peptide, influenza virus peptide, GALA peptide, abrin, modeccin, Pseudomonas exotoxin, bryodin, mistletoe lectin, Shiga toxin, Escherichia coli labile toxin, Pertussis toxin, cholera toxin, anthrax toxin, viscumin, spaorin, gelonin, momordin, trichlosanthin, and pokeweed antiviral protein.

62. (Previously presented) The method of Claim 34, wherein the therapeutic agent is ricin.

63. (Previously presented) The method of Claim 34, wherein the transport agent is poly(propylacrylic acid) and the therapeutic agent is ricin.

64. (Previously presented) The method of Claim 34, wherein the diagnostic agent is a radiolabeled agent.

65. (Previously presented) The method of Claim 34, wherein the diagnostic agent is a fluorescently labeled agent.

66. (Previously presented) The method of Claim 34, wherein the diagnostic agent is an enzymatically labeled agent.

67. (Previously presented) The method of Claim 34, wherein the diagnostic agent is a contrast agent.

68-73. (Canceled)

74. (Previously presented) A composition for delivering a therapeutic or diagnostic agent to a cell, consisting essentially of (a) a transport agent and (b) a therapeutic or diagnostic agent, wherein the therapeutic or diagnostic agent is covalently coupled to the transport agent, wherein the transport agent is effective in disrupting the endosomal membrane, wherein the transport agent is a polycarboxylic acid polymer selected from the group consisting of poly(ethylacrylic acid), poly(propylacrylic acid), poly(butylacrylic acid), and mixtures thereof, and wherein the transport agent is hydrophobic at pH from about 5.1 to about 5.5.

75-76. (Canceled).

77. (Previously presented) The composition of Claim 74, wherein the transport agent is hydrophilic at pH from about 6.8 to about 7.5, and hydrophobic at pH from about 5.0 to about 6.5.

78-100. (Canceled)

101. (Previously presented) A method for delivering a therapeutic or diagnostic agent to a cell, comprising:

(a) treating a cell with a transport agent and a therapeutic or diagnostic agent, wherein the therapeutic agent is covalently coupled to the transport agent, wherein the transport agent and therapeutic or diagnostic agent are taken into the cell by endocytosis to provide an endosome having an endosomal membrane and containing the transport agent and therapeutic or diagnostic agent, and wherein the transport agent is a poly(alkylacrylic acid) selected from the group consisting of poly(ethylacrylic acid), poly(propylacrylic acid), poly(butylacrylic acid), and mixtures thereof; and

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(b) releasing the transport agent and therapeutic or diagnostic agent from the endosome into the cell cytoplasm by the action of the transport agent on the endosomal membrane.

102. (Previously presented) A composition for delivering a therapeutic or diagnostic agent to a cell, consisting essentially of (a) a transport agent and (b) a therapeutic or diagnostic agent, wherein the therapeutic or diagnostic agent is covalently coupled to the transport agent, and wherein the transport agent is a poly(alkylacrylic acid) selected from the group consisting of poly(ethylacrylic acid), poly(propylacrylic acid), poly(butylacrylic acid), and mixtures thereof.

103-118. (Canceled)

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